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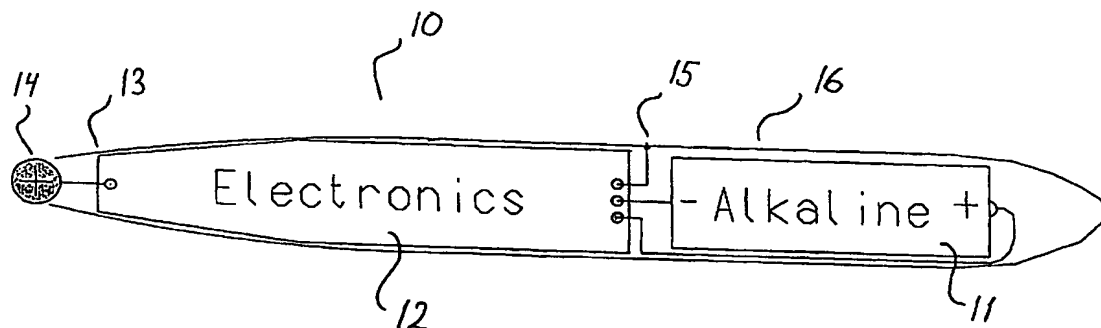
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For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: ELECTRO-THERAPEUTIC DEVICE AND METHOD OF ELECTRO-THERAPEUTIC TREATMENT



(57) Abstract: There is provided an electro-therapeutic device having first and second electrodes or probes for making electrical contact to the body of an individual. The device has voltage supplying means for supplying an alternating output voltage across the electrodes to pass an alternating current through the body of the individual, and the voltage supply means are adapted for controlling the frequency of the output voltage so that the output voltage frequency is automatically changing in time between a low frequency and a high frequency. The voltage supply means may be adapted for controlling the frequency of the output voltage so that the output voltage frequency is changing between a low frequency and a high frequency at regular time intervals. There is further provided a method of applying an electrical stimulation signal to the body of an individual, where the method comprises providing an electrical stimulation signal with an electrical current having an AC component, where the AC component is changing in time between a low frequency and a high frequency with said high frequency being higher than said low frequency. The electrical stimulation signal is applied to a selected point of contact on the body of the individual in a manner to pass the electrical current through the selected point of contact on the body.

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/DK 03/00891

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61N1/34 A61N1/36 //A61H39/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61N A61H A61B H03K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	US 6 567 702 B1 (MAZE MERVYN ET AL) 20 May 2003 (2003-05-20) column 3, line 35 -column 4, line 34; figures 1,2 abstract	1-29, 39-78
P,Y	---	30-33
X	US 5 593 432 A (CROWTHER DECEASED GORDON H ET AL) 14 January 1997 (1997-01-14) claims 1-3; figures 1,2 abstract column Y, line 30-33	1-29, 39-78
X	US 5 251 637 A (SHALVI RAM) 12 October 1993 (1993-10-12) summary of the invention column 7, line 16 - line 28; figures 1-3 ---	1-33, 39-78
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

3 August 2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 541 432 A (GARCEAU ROGER ET AL) 17 September 1985 (1985-09-17) column 3, line 1 -column 6, line 32; figures 1-5 ---	1-33, 39-78
X	US 4 180 079 A (WING THOMAS W) 25 December 1979 (1979-12-25) the whole document ---	1-29, 39-78
Y	---	30-33
X	GB 997 670 A (PETER GILHEAD) 7 July 1965 (1965-07-07) the whole document ---	1-33, 39-78
A	GB 1 416 141 A (GILHEAD P) 3 December 1975 (1975-12-03) page 1, line 72 -page 2, line 55 claims 1-11; figures 1,2 ---	1-29, 39-78
Y	---	30-33
A	DE 299 06 921 U (POERTNER DIETER) 2 September 1999 (1999-09-02) the whole document ---	1-78
A	US 2001/044318 A1 (TAKALUOMA ANTTI ILKKA ET AL) 22 November 2001 (2001-11-22) paragraph [0014] -----	34-38

# INTERNATIONAL SEARCH REPORT

ational application No.  
PCT/DK 03/00891

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 44-78  
because they relate to subject matter not required to be searched by this Authority, namely:  
Claims 44-78 relate to a method of treatment of the human body by therapy practised on the human body (Rule 39.1(iv)). Nevertheless a search has been executed for these claims. The search has been based on the alleged effects of the device.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-25 and 39-41

An electro therapeutic stimulation device having automatic frequency, voltage, current and timing control means. Claims 1-25 and 39-41.

2. Claims: 26-29, 42 and 43

An electro therapeutic stimulation device having an active and a passive electrode. Claims 26-29, 42 and 43.

3. Claims: 30-33

An electro therapeutic stimulation device, using means for resistance detection and means for representing the measurements. Claims 30-33.

4. Claims: 34-38

An electro therapeutic stimulation device having means for shifting the device into active or stand by mode. Claims 34-38.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/DK 03/00891

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6567702	B1	20-05-2003	NONE	
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